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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,365	01/14/2002	Karl-Heinz Dörner	Mo6657/LeA 34,814	5079

157 7590 09/10/2003

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EXAMINER

TRAN, THAO T

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,365

Applicant(s)

DORNER ET AL.

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "the rear side" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Remark

3. The examiner is interpreting "composed of" in claim 1, line 3, as open claim language.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1- 6 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US Pat. 4,830,038) or Anderson et al. (US Pat. 5,008,062).

Anderson '038 and Anderson '062, each teaches a solar module (photovoltaic module) and a method of making, the solar module comprising at least one solar cell 14, 22; transparent electrical conductors 24; transparent polymer sheets 18, 19; an elastomer encapsulant layer 30 (see abstract; Figs. 1-3; col. 3, ln. 42 to col. 4, ln. 45). The solar module is formed by securing the solar cell onto a thin film of transparent electrical conductor 24 or a transparent sheet 18, 19, 160, 164; and applying polyurethane to the solar cell by a reaction injection molding process (see Figs. 1-5, 8).

The elastomer encapsulate is made of polyurethane that may contain fillers such as carbon black, or glass fibers (see col. 5, ln. 49 to col. 6, ln. 40).

It is hereby noted that in a solar module, the front and back sides would be taken as back and front sides respectively.

Claim Rejections - 35 USC § 103

6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson '038 and Anderson '062 as applied to claim 1 above.

Anderson '038 and Anderson '062 are as set forth in claim 1 above and incorporated herein.

Although neither reference teaches the back side as having a textured surface or being in the form of cooling fins, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the shape of the surface would have been an obvious design choice in order to bring forth optimal benefits attendant therewith. Moreover, Applicants do not disclose any advantages of having a textured surface. Being fin-shaped would increase the surface area,

Art Unit: 1711

enhance dissipation of heat, and hence would increase the efficiency and lifetime of the solar module.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 703-306-5698. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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September 4, 2003



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700